## WHAT IS CLAIMED IS:

- 1. A winding structure of an inductor used in a power factor correction circuit, comprising:
  - a ring-shaped core with a gap; and
- a first coil and a second coil wound around said core, wherein the negative end of said first coil and the positive end of said second coil is coupled to form a central tap.
- 2. The winding structure according to claim 1 wherein said core is further covered with an insulating layer.
- 3. The winding structure according to claim 2 wherein said insulating layer is made of polyvinyl chloride (PVC).
- 4. The winding structure according to claim 1 wherein each of said first coil and said second coil is made double by winding two parallel winding conductors around said core.
- 5. The winding structure according to claim 1 wherein said core is further wrapped by an adhesive tape.
- 6. An apparatus for fastening a winding structure of an inductor, said winding structure comprising a ring-shaped core wound around a first coil and a second coil, said apparatus comprising:

an upper bracket having a first plate with a first opening in the center and a first sleeve extending downwards; and

- a lower bracket having a second plate with a second opening in the center and a second sleeve extending upwards, wherein said first sleeve are in contact with said second sleeve and inserted into the interior space of said winding structure.
  - 7. The apparatus according to claim 6 wherein said upper bracket and said

lower bracket are connected by coupling a screw with a nut.